

A NEW *EDROTES* FROM BAJA CALIFORNIA (COLEOPTERA:TENEBRIONIDAE)

CHARLES A. TRIPLEHORN

Department of Entomology, The Ohio State University, Columbus 43210

ABSTRACT

Edrotes fossor n.sp. is described from Mexico (Baja California, Sur) and it is distinguished from the 4 previously known species.

Four species of *Edrotes* were recognized by Doyen (1968:218) who reviewed the phylogenetic position of the genus, presented a key to species, and described *E. leechi* from Utah. The description below follows the format used by Doyen in his description of *leechi*.

Edrotes fossor Triplehorn, NEW SPECIES

General form globose, strongly convex, light to dark reddish-brown; entire dorsum sparsely clothed with long, erect, bright golden setae; entire body densely clothed with shorter, recumbent setae.

Head (Fig. 1): amplected into prothorax up to eyes; dorsally densely clothed with medially-directed golden setae, most of which are recumbent and so densely matted as to obscure surface sculpture, a few erect setae more numerous laterally; coarsely punctate ventrally, each puncture bearing a long or short golden seta; epistoma distinctly bifid apically, narrowed behind apex, strongly tumescent basally; immediate anterior margin narrowly concave within. Supra-antennal ridge obtusely angulate, coarsely punctate; labrum (frequently retracted) bilobed and clothed with golden setae which are directed cephalad and very dense anteriorly; mandibles bifid apically, each with a prominent dorsal cusp, strongly clasping labrum, cusps subequal in size; eyes nearly round; preular cavity subequal in

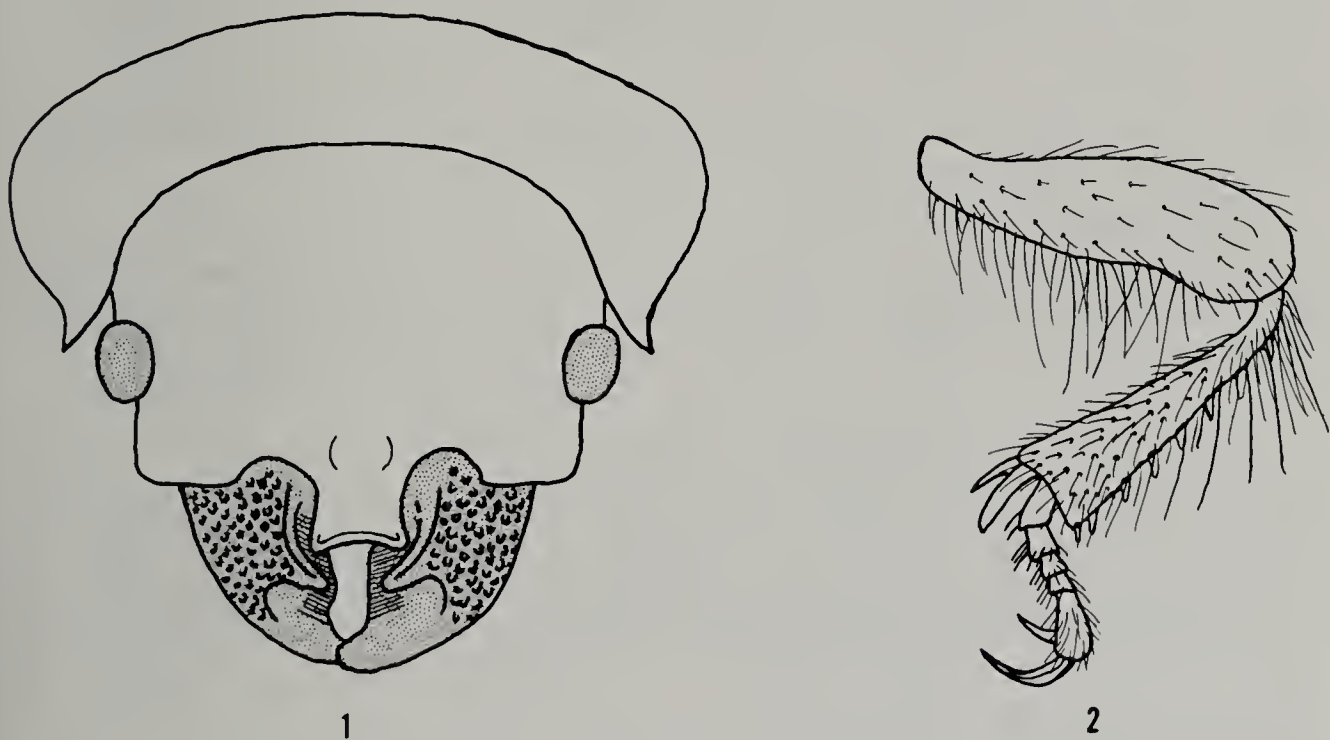


Fig. 1-2: *Edrotes fossor*. 1) Dorsal view of head and pronotum, pubescence omitted. 2) Dorsal view of left prothoracic leg.

width to mentum; antennae slender, third segment longest, subequal in length to segments 4 and 5 combined, apical 5 segments slightly expanded apically, forming a very loose club and clothed with very fine recumbent setae, terminal segment tapering to a point; mentum deeply emerginate anteriorly, coarsely and rugosely punctate; terminal segment of maxillary palpus feebly securiform, rounded apically.

Prothorax: short, transverse, convex, lateral margins rounded with little or no trace of a line or ridge delimiting upper and lower surfaces, anterior margin feebly concave, basal margin nearly straight, anterior angles acute and everted but not projecting much beyond posterior margin of eye; setae similar to those of head, directed medially and densely matted, obscuring surface sculpture, a few semi-erect setae also directed medially; ventral surface coarsely punctate, each puncture bearing a long or short, posteriorly directed golden setae; prosternal process narrower than width of procoxal cavity, strongly declivous behind coxae.

Elytra: slightly broader than long; setae sparser than on head and pronotum, longer ones semi-erect and arising from a shallow puncture cephalad of which is a small tubercle, with shorter setae directed caudad and not associated with either punctures or tubercles; long setae most abundant laterally where they form a dense fringe; epipleural ridge arcuate, obsolete opposite anterior margin of metacoxa; epipleura with only a few widely spaced, coarse punctures, each of which bears a very fine, short golden seta; scutellum obsolete.

Mesosternum, *metasternum*, and *abdominal sterna*: coarsely and densely punctate, each puncture with a short, posteriorly-directed golden seta; mesosternum feebly declivous anteriorly, barely meeting prosternal process; mesocoxae separated by less than width of mesocoxa; abdominal intercoxal process obtusely angulate; abdominal sterna 2, 3, and 4 narrow, transverse, terminal segment large, broadly rounded.

Legs: moderately long, femora clavate, barely extending beyond lateral body margins, sparsely fringed ventrally with long golden setae; protibia (Figure 2) strongly expanded apically, outer angle produced and prominent, ventral surface somewhat concave; mesotibia and metatibia moderately expanded apically; all tibiae sparsely clothed both dorsally and ventrally with long, golden setae and with outer edges serrate, each serration bearing a blunt, curved spine; apical tibial spurs short and stout.

Sexes externally identical.

Mean length (elytra and prothorax) of 67 specimens: 5.65mm; standard deviation: 0.29mm; range: 4.9 to 6.4mm. Mean width (elytra at broadest point): 4.78mm; standard deviation: 0.29mm; range: 4.0 to 5.4mm.

Holotype (sex undetermined): MEXICO, Baja California, Sur, 1 mile east of Casas Viejas, Sierra de la Victoria Mts. (800 feet), 27-X-68, E. L. Sleeper and F. J. Moore (Ohio State University Collection of Insects and Spiders). *Paratypes*: 42 with same data as holotype; 24 from Baja California, Sur, 2.5 miles south of Santa Anita (400 feet), 2-XII-68, E. L. Sleeper and F. J. Moore. Paratypes deposited in collections of The Ohio State University, Long Beach State College, United States National Museum, and California Academy of Sciences.

Edrotes fossor resembles *leechi* Doyen more closely than any other member of the genus, and Doyen's photographs of *leechi* could almost suffice

for *fossor*; both species have strongly declivous mesosterna and narrow prosternal processes which barely meet; while in *ventricosus* LeConte and *arens* La Rivers the prosternal process meets the mesosternum firmly and broadly in about the same plane; *rotundus* (Say) is somewhat intermediate in regard to this character. *E. fossor* will run to *ventricosus* rather than *leechi* in Doyen's key because it lacks the unique spatulate process on the basal protarsal segment of *leechi*.

The mandibular cusps of *fossor* are not unique, since all species of *Edrotes* have at least a slight modification of the mandibular base. These cusps are very prominent in some specimens of *ventricosus*, but they are not as strongly convergent as in *fossor*, and in most instances the right cusp is better developed than the left.

The most diagnostic characters for separating *fossor* from the other 4 species of *Edrotes* are the expanded protibiae, the shape of the epistoma and the prominent tumescence at its base, and the very thick dorsal vestiture of the head and thorax.

LITERATURE CITED

- DOYEN, J. T., 1968. The phylogenetic position of *Edrotes* and a new species of the genus (Coleoptera:Tenebrionidae). Pan-Pacific Ent. 44(3): 218-227.

LITERATURE NOTICE

CATALOGUE OF TENEBRIONID TYPES

In 2 previous issues (Coleopt. Bull. 25(2 & 3)) we have noted several catalogues and lists of type material in various collections. The following paper was brought to our attention by T. J. Spilman:

- Kulzer, H. 1963. Verzeichnis des Typenmaterials der Tenebrionidensammlung des Museums G. Frey. Ent. Arbeit. Mus. G. Frey 14(2): 375-434.

This fantastically long list of species is indicative of the extensive beetle collection of the Frey Museum. In 1959, the collection contained approximately 12,000 species of Tenebrionidae (72% of the known species), including 1700 types and 2000 paratypes. The list is alphabetically arranged by genus and species. Also noted are the describers, date of publication, and whether holotype or paratype. The introduction contains data on the private collections encompassed and the taxonomists who worked on this material.—R. E. Woodruff.

LITERATURE NOTICE

In 1948, Jean Balazuc published his extensive work on beetle monstrosities: "La Tératologie des Coléoptères et expériences de transplantation sur *Tenebrio molitor* L.", Mém. Mus. Nat. Hist. Nat. (Paris) (New Series) 25:1-293; 223 fig. He recorded and illustrated the many freaks, and provided an extensive bibliography on the subject. He also attempted explanations for such anomalies.

In 1969, he brought this work up to date with: "Supplément à la Tératologie des Coleopteres." Redia 51:39-111; 17 fig.—T. J. Spilman.